Form Last Modified January 14, 2002

National Environmental Achievement Track

A02-0044
1/24/02

Application Form

IBM-Thomas J Watson Research Center

Name of facility

International Business Machines Corporation

Name of parent company (if any)

Route 134

Street address

Box 218

Street address (cont.)

Yorktown Heights, NY 10598

City/State/Zip code

Give us information about your contact person for the National Environmental Achievement Track Program.

Name Kyle F. Pero

Title Manager, Environmental Engineering and Operations

Phone (914) 945-2533

Fax (914) 945-4477

E-mail kpero@ibm.us.com

Section A

Tell us about your facility.

Why do we need this information?
EPA needs background information on your facility to evaluate your application.

What do you need to do?

- Provide background information on your facility.
- Identify your environmental requirements.

1 What do you do or make at your facility?

*The mission of T.J. Watson is to make scientific and technology advances that will contribute to IBM's future success. Waston activities continue to focus on emerging areas in the fields of computer applications, solutions, services, systems, software and display technology.

The Thomas J Watson Research Center in Yorktown Heights, New York is a stand alone research facility that is entirely dedicated to the advancement of science. It fosters numerous scientific endeavors and exports innovation in support of its mission.*

2 List the Standard Industrial Classification (SIC) code(s) or North American Industrial Classification System (NAICS) codes that you use to classify business at your facility.

SIC
3571-2

NAICS

3 Does your company meet the Small Business Administration definition of a small business for your sector?

[ ] Yes [X] No

4 How many employees (full-time equivalents) currently work at your facility?

[ ] Fewer than 50
[ ] 50-99
[ ] 100-499
[ ] 500-1,000
[X] More than 1,000

Section A, continued

5 Does your facility have an EPA ID number(s)?

[X] Yes [ ] No

If yes, list in the right-hand column.

TRI - 10598NTLBSRTE 13
Hazwaste permit # NYD084006741

6 Identify the environmental requirements that apply to your facility. Use the Environmental Requirements Checklist, at the back of the instructions, as a reference. List your requirements to the right **or** enclose a completed Checklist with your application.

See attached checklist

7 Check the appropriate box in the right-hand column.

[ ] I've listed the requirements above.

[X] I've enclosed the Checklist with my application.

8 Optional: Is there anything else you would like to tell us about your facility?

Site within New York City watershed and contains extensive State and local designated wetlands. Site is participating in a PILOT Program. Title ownership is the Empire State Development Corporation and IBM is the primary operator.

Section B

Tell us about your EMS.

Why do we need this information?
Facilities must have an operating Environmental Management System (EMS) that meets certain requirements.

What do you need to do?

- Confirm that your EMS meets the Achievement Track requirements.
- Tell us if you have completed a self-assessment or have had a third-party assessment of your EMS.

1 Check **yes** if your EMS meets the requirements for each element below as defined in the instructions.

a. Environmental policy ----------	X	Yes
b. Planning ----------	X	Yes
c. Implementation and operation ----------	X	Yes
d. Checking and corrective action ----------	X	Yes
e. Management review ----------	X	Yes

2 Have you completed at least one EMS cycle (plan-do-check-act)? — X Yes

3 Did this cycle include both an EMS and a compliance audit? — X Yes

4 Have you completed an objective self-assessment or third-party assessment of your EMS? — X Yes

If yes, what method of EMS assessment did you use?

X Self-assessment

Note:
IBM Professional Self Assessment-Internal Protocol Location Internal EMS (ISO 14001) Audits

[ ] GEMI [X] Other

[ ] CEMP See note

[ ] Third-party assessment

Note:
IBM Corporate Internal Audit-Independent Organization within IBM.

X ISO 14001 Certification

X Other See note

Section C

Tell us about your past achievements and future commitments.

Why do we need this information?
Facilities must show that they are committed to Improving their environmental performance. This means that you can describe past achievements and will make future commitments.

What do you need to do?
Refer to the Environmental Performance Table in the instructions to answer questions 1 and 2.

1 Describe your past achievements for at least two environmental aspects. If you need more space than is provided, attach copies of this page.

Note to small facilities: If you qualify as a small facility as defined in the instructions, you are required to report past achievement for at least one environmental aspect.

First aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)? y1998		What is the current level? y2000	
	Quantity	Units	Quantity	Units
Total Municipal Water Use				

i. How is the current level an improvement over the previous level?

Even though the site has experienced steady population and business expansion, water usage has been steadily decreasing over the past few years due to various conservation measures. This decrease represents an 11% reduction over the past two years.

ii How did you achieve this improvement?

A water conservation program helped to make all employees aware of the increasing usage. Various flyers, notices and other means reminded people to conserve water whenever possible.

Section C, continued

Second aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)? y1998		What is the current level? y2000	
	Quantity	Units	Quantity	Units
Total Energy Use	420,260	MMBTU	411,789	MMBTU

i. How is the current level an improvement over the previous level?

The quantities represent combined energy consumption from electricity and fuel oil sources. A 2% reduction was achieved from 1998 to 2000, despite increases in productivity and personnel.

ii How did you achieve this improvement?

The improvement was achieved through energy conservation measures and energy awareness programs. Various flyers, notices and displays reminded people to conserve energy whenever possible.

MMBTU = million BTUs

2 Select at least four environmental aspects (no more than two from any one category) from the Environmental Performance Table in the instructions and then tell us about your future commitments. If you need more space than is provided, attach copies of this section.

Note to small facilities: If you are a small facility, you are required to make commitments for at least two environmental aspects in two different categories.

First aspect you've selected

a. What is the aspect? Total Municipal Water Use

b. Is this aspect identified as significant in your EMS? [X] Yes [ ] No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

GPY = gallons per year

[X] Option A: Absolute value — 69,466,676 GPY (Quantity/Units)

[ ] Option B: In terms of units of production or output — (Quantity/Units)

Section C, continued

d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.

*Based on a 4% average annual improvement over the current rate.

X	Option A: Absolute value	61,066,676 GPY (Quantity/Units)
	Option B: In terms of units of production or output	(Quantity/Units)

e. How will you achieve this improvement? (See note below)

The Thomas J. Watson Research Center site is served by a municipal water source. Due to the extraordinarily high cost of water, the site explored and implemented innovative ideas to reutilize and recycle water from a variety of sources. Recycled sources include the use of reject water from the deionized water reverse osmosis process and groundwater from the corrective action program which are used for cooling tower make-up. Further achievement will be accomplished through continued awareness of water conservation and the reduction of deionized water usage.

Second aspect you've selected

a. What is the aspect? Total Solid Waste

b. Is this aspect identified as significant in your EMS? X Yes ___ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.

Note: The Watson Research Center will achieve the Corporate recycling rate of 67% for Non-hazardous waste recycling.

*Based on a 2.4% average annual improvement over the current rate.

		% recycle 82%
X	Option A: Absolute value	1,554.3 Tons (Quantity/Units)
	Option B: In terms of units of production or output	(Quantity/Units)
X	Option A: Absolute value	1,464.3 Tons* (Quantity/Units)
	Option B: In terms of units of production or output	(Quantity/Units)

e. How will you achieve this improvement? (See note below)

All non-hazardous solid waste is collected and brought to a recycling center. Laborers sort through the trash to reclaim; cardboard, paper, wood, scrap metal, plastic, glass, and construction debris. These wastes are accumulated and then sent out to recycling facilities. Further achievement will be accomplished through conservation awareness programs and better source separation.

Section C, continued

Third aspect you've selected

a. What is the aspect? — Total Energy Use

b. Is this aspect identified as significant in your EMS? — [X] Yes [ ] No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

- [X] Option A: Absolute value — 411,789 MMBTU (Quantity/Units)
- [ ] Option B: In terms of units of production or output — (Quantity/Units)

d. What is the improvement you are committing to over the next three years?You may choose to state this as an absolute value or in terms of units of production or output.

*Based on a 3.6% average annual reduction over the current rate

- [X] Option A: Absolute value — 366,789MMBTU* (Quantity/Units)
- [ ] Option B: In terms of units of production or output — (Quantity/Units)

e. How will you achieve this improvement?

Continued awareness programs, reduction in building exhaust ventilation, periodic boiler tune-ups, variable frequency motor drives and and high efficiency lighting fixture replacement.

Fourth aspect you've selected

a. What is the aspect? — Total Hazardous Waste

b. Is this aspect identified as significant in your EMS? — [X] Yes [ ] No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

- [X] Option A: Absolute value — 151.11 Tons (Quantity/Units)
- [ ] Option B: In terms of units of production or output — (Quantity/Units)

d. What is the improvement you are committing to over the next three years?You may choose to state this as an absolute value or in terms of units of production or output.

*Based on a 3.3% average annual improvement over the current rate.

- [X] Option A: Absolute value — 136.11Tons* (Quantity/Units)
- [ ] Option B: In terms of units of production or output — (Quantity/Units)

e. How will you achieve this improvement?

More efficient site usage of chemicals will result in less disposal. Improved recycling of hazardous waste streams including: batteries, mercury, lead, precious metal solutions and fuel oil sludges.

Section D

Tell us about your public outreach and reporting.

Why do we need this information?

Facilities must demonstrate their commitment to public outreach and performance reporting. You should have appropriate mechanisms in place to identify community concerns, to communicate with the public, and to provide information on your environmental performance.

What do you need to do?

- Describe your approach to public outreach.
- List three references who are familiar with your facility.

1 How do you identify and respond to community concerns?

(Note) IBM Watson has procedures in our EMS to address/respond to community concerns and public outreach.

Community members express their concerns to our site communications department. Our site also has various outreach programs to educate the public about our site*. IBM also publishes an annual Corporate Environmental Report which is available to the public.

2 How do you inform community members of important matters that affect them?

(See note below)

IBM Watson holds as a minimum, annual open house programs called "invite the neighbors" to discuss current activities and future plans.

The Watson site sits in a unique surrounding shared with its neighbors. Diligence is always taken to assure that IBM remains an active member of the community in good standing with its neighbors and involved in local community groups. IBM Watson helped support a homeowner association movement to improve their drinking water quality by expanding the existing water district. IBM contributed with both support and a substantial monetary donation.

Watson has long understood the vital importance of promoting science and mathematics to young people and has numerous educational outreach programs that support this including; Honors Math and Science, Saturday Family Science, Technology Camp for Young Women, National Engineers Week, New York State Science Talent Search, Earth Day and Take 'Your Child' to Work

3 How will you make the Achievement Track Annual Performance Report available to the public?

- [X] Website *www*.ibm.com/ibm/environment/
- [ ] Newspaper
- [X] Open Houses
- [ ] Other

Section D, continued

4 Are there any ongoing citizen suits against your facility? [ ] Yes [X] No

If yes, describe briefly in the right-hand column.

5 List references below.

	Organization	Name	Phone number
Representative of a Community/ Citizen Group	Teatown Lake Reservation	Gail Abrams	(914) 762-2912
State/Local regulator	Town Supervisor	Linda Cooper	(914) 962-5722
	NYSDEC	Keith Gronwald	(518) 402-8594
Other community/local reference	Westchester County LEPC, Chairman	Don Sabrsula	(914) 785-2896

Section E

Application and Participation Statement.

On behalf of IBM - Thomas J Watson Research Center

(my facility),

I certify that

I have read and agree to the terms and conditions, as specified in the *National Environmental Achievement Track Program Description* and in the *Application Instruction*s;

- I have personally examined and am familiar with the information contained in this Application, (including, if attached, the Environmental Requirements Checklist). The information contained in this Application is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete, and I have no reason to believe the facility would not meet all program requirements;
- My facility has an environmental management system (EMS), as defined in the Achievement Track EMS requirements, including systems to maintain compliance with all applicable federal, state, tribal,and local environmental requirements, in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;
- My facility has conducted an objective assessment of its compliance with all federal, state, tribal, and local environmental requirements, and the facility has corrected all identified instances of potential or actual noncompliance;
- Based on the foregoing compliance assessment and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.

I agree that EPA's decision whether to accept participants into or remove them from the National Environmental Achievement Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior facility manager and fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is applying to this program.

Signature/Date (original signed on October 25, 2001)

Printed Name/Title Alan G. Ganek, V.P., Tech, Strategy and W.W .Ops.

Facility Name IBM - Thomas J Watson Research Center

Facility Street Address Route 134, Box 218 Yorktown Heights, NY 10598

Facility ID Numbers Hazwaste permit # NYD084006741
TRI - 10598NTLBSRTE 13

National Environmental Achievement Track

Environmental Requirements Checklist

The following *Checklist* is provided to assist facilities in answering *Section A, Tell us about Your facility, Question 6.* The *Checklist* is given to help facilities identify the major federal, state, tribal, and local environmental requirements applicable at their facilities. The *Checklist* is not intended to be an exhaustive list of all environmental requirements that may be applicable at an individual facility.

If you use this *Checklist* and choose to submit it with your application, fill in your facility information below and enclose the completed *Checklist* with your application (see instructions).

Facility Name: **IBM Thomas J Watson Research Center**

Facility Location: **Yorktown Heights, NY 10598**

Facility ID Number(s) **NYD084006741, 10598NTLBSRTE 13**
(attach additional sheets if necessary)

		Check All That Apply
Air Pollution Regulations		
1.	National Emission Standards for Hazardous Air Pollutants (40 CFR 61)	
2.	Permits and Registration of Air Pollution Sources	X
3.	General Emission Standards, Prohibitions and Restrictions	X
4.	Control of Incinerators	
5.	Process Industry Emission Standards	
6.	Control of Fuel Burning Equipment	X
7.	Control of VOCs	X
8.	Sampling, Testing and Reporting	
9.	Visible Emissions Standards	X
10.	Control of Fugitive Dust	
11.	Toxic Air Pollutants Control	X
12.	Vehicle Emissions Inspections and Testing	
Other Federal, State, Tribal or Local Air Pollution Regulations Not Listed Above *(identify)*		
13.	Title V Air Permit (Federal)	X
14.		

Hazardous Waste Management Regulations

1.	Identification and Listing of Hazardous Waste (40 CFR 261)	
	- Characteristic Waste	X
	- Listed Waste	X
2.	Standards Applicable to Generators of Hazardous Waste (40 CFR 262)	
	- Manifesting	X
	- Pre-transport requirements	X
	- Record keeping/reporting	X
3.	Standards Applicable to Transporters of Hazardous Waste (40 CFR 263)	
	- Transfer facility requirements	
	- Manifest system and record-keeping	
	- Hazardous waste discharges	
4.	Standards for Owners and Operators of TSD Facilities (40 CFR 264)	
	- General facility standards	X
	- Preparedness and prevention	X
	- Contingency plan and emergency procedures	X
	- Manifest system, Record keeping and reporting	X
	- Groundwater protection	X
	- Financial requirements	X
	- Use and management of containers	X
	- Tanks	
	- Waste piles	
	- Land treatment	
	- Incinerators	
5.	Interim Status Standards for TSD Owners and Operators (40 CFR 265)	
6.	Interim Standards for Owners and Operators of New Hazardous Waste Land Disposal Facilities (40 CFR 267)	
7.	Administered Permit Program (Part B) (40 CFR 270)	X

Other Federal, State, Tribal or Local Hazardous Waste Management Regulations Not Listed Above (*identify*)

8.	HSWA Permit	X
9.	NYS Part 373 Hazardous Waste Management Regulations	X

Hazardous Materials Management

1.	Control of Pollution by Oil and Hazardous Substances (33 CFR 153)	
2.	Designation of Reportable Quantities and Notification of Hazardous Materials Spill (40 CFR 302)	X
3.	Hazardous Materials Transportation Regulations (49 CFR 172-173)	X
4.	Worker Right-to-Know Regulations (29 CFR 1910.1200)	X
5.	Community Right-to-Know Regulations (40 CFR 350-372)	X

Other Federal, State, Tribal or Local Hazardous Waste Management Regulations Not Listed Above (*identify*)

6. _____

7. _____

Solid Waste Management

1.	Criteria for Classification of Solid Waste Disposal Facilities and Practices (40 CFR 257)
2.	Permit Requirements for Solid Waste Disposal Facilities
3.	Installation of Systems of Refuse Disposal
4.	Solid Waste Storage and Removal Requirements
5.	Disposal Requirements for Special Wastes

Other Federal, State, Tribal or Local Hazardous Waste Management Regulations Not Listed Above (*identify*)

6. _____

7. _____

Water Pollution Control Requirements

1.	Oil Spill Prevention Control and Countermeasures (SPCC) (40 CFR 112)	X
2.	Designation of Hazardous Substances (40 CFR 116)	
3.	Determination of Reportable Quantities for Hazardous Substances (40 CFR 117)	X
4.	NPDES Permit Requirements (40 CFR 122)	
5.	Toxic Pollutant Effluent Standards (40 CFR 129)	
6.	General Pretreatment Regulations for Existing and New Sources (40 CFR 403)	X
7.	Organic Chemicals Manufacturing Point Source Effluent Guidelines And Standards (40 CFR 414)	
8.	Inorganic Chemicals Manufacturing Point Source Effluent Guidelines and Standards (40 CFR 415)	
9.	Plastics and Synthetics Point Source Effluent Guidelines and Standards (40 CFR 416)	
10.	Water Quality Standards	
11.	Effluent Limitations for Direct Dischargers	
12.	Permit Monitoring/Reporting Requirements	X
13.	Classifications and Certifications of Operators and Superintendents of Industrial Wastewater Plants	
14.	Collection, Handling, Processing of Sewage Sludge	
15.	Oil Discharge Containment, Control and Cleanup	
16.	Standards Applicable to Indirect Discharges (Pretreatment)	X

Other Federal, State, Tribal or Local Water Pollution Control Regulations Not Listed Above (*identify*)

17.	General Stormwater Permit (State)	X
18.		

Drinking Water Regulations

1. Underground Injection and Control Regulations, Crieria and Standards (40 CFR 144, 146)
2. National Primary Drinking Water Standards (40 CFR 141)
3. Community Water Systems, Monitoring and Reporting Requirements (40 CFR 141)
4. Permit Requirements for Appropriation /Use of Water from Surface or Subsurface Sources
5. Underground Injection Control Requirements
6. Monitoring, Reporting and Record keeping Requirements for Community Water Systems

Other Federal, State, Tribal or Local Drinking Water Regulations Not Listed Above (*identify*)

7. _____

8. _____

Toxic Substances

1.	Manufacture and Import of Chemicals, Record keeping and Reporting Requirements (40 CFR 704)	X
2.	Import and Export of Chemicals (40 CFR 707)	X
3.	Chemical Substances Inventory Reporting Requirements (40 CFR 710)	X
4.	Chemical Information Rules (40 CFR 712)	X
5.	Health and Safety Data Reporting (40 CFR 716)	
6.	Pre-Manufacture Notifications (40 CFR 720)	X
7.	PCB Distribution Use, Storage and Disposal (40 CFR 761)	X
8.	Regulations on Use of Fully Halogenated Chlorofluoroalkanes (40 CFR 762)	
9.	Storage and Disposal of Waste Material Containing TCDD (40 CFR 775)	

Other Federal, State, Tribal or Local Toxic Substances Regulations Not Listed Above (*identify*)

10.	NYS Chemical Bulk Storage Regulations	X
11.	Westchester County Bulk Petroleum Storage Facility Regulations	X

Pesticide Regulations

1.	FTFRA Pesticide Use Classification (40 CFR 162)	
2.	Procedures for Disposal and Storage of Pesticides and Containers (40 CFR 165)	
3.	Certification of Pesticide Applications (40 CFR 17 1)	
4.	Pesticide Licensing Requirements	X
5.	Labeling of Pesticides	
6.	Pesticide Sales, Permits, Records, Application and Disposal Requirements	
7.	Disposal of Pesticide Containers	
8.	Restricted Use and Prohibited Pesticides	

Other Federal, State, Tribal or Local Pesticides Regulations Not Listed Above (*identify*)

9.	NYS Pesticide Regulations	X
10.		

Environmental Clean-Up. Restoration, Corrective Action

1. Comprehensive Environmental Response, Compensation and Liability Act (Superfund) (*identify*)

2. RCRA Corrective Action (*identify*)

RCRA Groundwater Corrective Action (pump and treat program) X

Other Federal, State, Tribal or Local Environmental Clean-Up, Restoration, Corrective Action Regulations Not Listed Above (*identify*)

3. NYSDEC Regulations X

4.